

IN THE CLAIMS

Please delete all prior lists of claims in the application and insert the following list of claims.

1. (CURRENTLY AMENDED) A DNA expression construct comprising, in 5' to 3' order: a promoter, the promoter operationally linked to a secretion signal sequence, the secretion signal sequence operationally-linked to a DNA sequence encoding a proteolytic tryptase as shown in Fig. 1 having an active site mutation at an amino acid position selected from positions 44, 91, and 194 ~~of the proteolytic tryptase as shown in Fig. 1, (which positions correspond to residues 48, 95, and 198, respectively, of SEQ. ID. NOS. 6, 9, 21, 23, 25, 27, 37, 39, 41, and 43),~~ and wherein the expression construct drives expression of a mature proteolytic tryptase that lacks enzymatic activity in eukaryotic host cells transformed to contain the expression construct, the lack of enzymatic activity being due to the active site mutation.
2. (PREVIOUSLY PRESENTED) The DNA expression construct according to Claim 1, wherein the DNA sequence encoding the proteolytic tryptase having an active site mutation encodes skin tryptase.
3. (PREVIOUSLY PRESENTED) The DNA expression construct according to Claim 1, wherein the DNA sequence encoding the proteolytic tryptase having an active site mutation encodes lung tryptase.
4. (ORIGINAL) The DNA expression construct according to Claim 1, wherein the DNA sequence encoding the proteolytic tryptase having an active site mutation encodes a human proteolytic tryptase.

5. (PREVIOUSLY PRESENTED) The DNA expression construct according to Claim 1, wherein the active site mutation changes a native amino acid to a non-charged amino acid.
6. (PREVIOUSLY PRESENTED) The DNA expression construct according to Claim 5, wherein the active site mutation changes a native amino acid to an alanine.
7. (CURRENTLY AMENDED) A DNA expression construct comprising, in 5' to 3' order: a promoter, the promoter operationally linked to a secretion signal sequence, the secretion signal sequence operationally-linked to a DNA sequence encoding a proteolytic tryptase as shown in Fig. 1 having an active site mutation at an amino acid position selected from positions 44, 91, and 194 ~~of the proteolytic tryptase as shown in Fig. 1 (which positions correspond to residues 48, 95, and 198, respectively, of SEQ. ID. NOS: 6, 9, 21, 23, 25, 27, 37, 39, 41, and 43),~~ wherein the DNA sequence encoding the proteolytic tryptase having an active site mutation is a DNA sequence selected from the group consisting of SEQ. ID. NO. 20, SEQ. ID. NO. 22, SEQ. ID. NO. 24, SEQ. ID. NO. 26, SEQ. ID. NO. 36, SEQ. ID. NO. 38, SEQ. ID. NO. 40, and SEQ. ID. NO. 42, and wherein the expression construct drives expression of a mature proteolytic tryptase that lacks enzymatic activity in eukaryotic host cells transformed to contain the expression construct, the lack of enzymatic activity being due to the active site mutation.
8. (CURRENTLY AMENDED) A DNA expression construct comprising, in 5' to 3' order: a promoter, the promoter operationally linked to a secretion signal sequence, the secretion signal sequence operationally-linked to a DNA sequence encoding a proteolytic tryptase as shown in Fig. 1 having an active site mutation at an amino acid position selected from positions 44, 91, and 194 ~~of the proteolytic tryptase as shown in Fig. 1 (which positions correspond to residues 48, 95, and 198, respectively, of SEQ. ID. NOS: 6, 9, 21, 23, 25, 27, 37, 39, 41, and 43),~~ and

wherein the proteolytic tryptase has an amino acid sequence selected from the group consisting of SEQ. ID. NO. 21, SEQ. ID. NO. 23, SEQ. ID. NO. 25, SEQ. ID. NO. 27, SEQ. ID. NO. 37, SEQ. ID. NO. 39, SEQ. ID. NO. 41, and SEQ. ID. NO. 43, and further wherein the expression construct drives expression of a mature proteolytic tryptase that lacks enzymatic activity in eukaryotic host cells transformed to contain the expression construct, the lack of enzymatic activity being due to the active site mutation.

9. (ORIGINAL) The DNA expression construct according to Claim 1, wherein the secretion signal sequence encodes a KEX2 cleavage site.
10. (ORIGINAL) The DNA expression construct according to Claim 1, wherein the secretion signal sequence includes a 3' terminus encoding amino acid residues Leu-Glu-Lys-Arg.
11. (ORIGINAL) The DNA expression construct according to Claim 1, wherein the promoter is a constitutive promoter.
12. (ORIGINAL) The DNA expression construct according to Claim 1, wherein the promoter is an inducible promoter.
13. (ORIGINAL) A DNA expression construct comprising, in 5' to 3' order: a promoter selected from the group consisting of *AOX1*, *GAP*, *MOX*, *FMD*, *ADH*, *LAC4*, *XPR2*, *LEU2*, *GAM1*, *PGK1*, *GAL7*, *GADPH*, *CYC1*, and *CUP1*, the promoter operationally linked to a secretion signal sequence, the secretion signal sequence operationally-linked to a DNA sequence encoding proteolytic tryptase having an active site mutation, the DNA sequence operationally linked to a terminator sequence.

14. (PREVIOUSLY PRESENTED) The DNA expression construct according to Claim 13, wherein the DNA sequence encoding the proteolytic tryptase encodes skin tryptase.
15. (PREVIOUSLY PRESENTED) The DNA expression construct according to Claim 13, wherein the DNA sequence encoding the proteolytic tryptase encodes lung tryptase.
16. (ORIGINAL) The DNA expression construct according to Claim 13, wherein the DNA sequence encoding the proteolytic tryptase having an active site mutation encodes a human proteolytic tryptase.
17. (PREVIOUSLY PRESENTED) A DNA expression construct comprising, in 5' to 3' order: a promoter selected from the group consisting of *AOX1*, *GAP*, *MOX*, *FMD*, *ADH*, *LAC4*, *XPR2*, *LEU2*, *GAM1*, *PGK1*, *GAL7*, *GADPH*, *CYC1*, and *CUP1*, the promoter operationally linked to a secretion signal sequence, the secretion signal sequence operationally-linked to a DNA sequence encoding proteolytic tryptase having an active site mutation, the DNA sequence operationally linked to a terminator sequence, wherein the DNA sequence encoding the proteolytic tryptase having an active site mutation is a DNA sequence selected from the group consisting of SEQ. ID. NO. 20, SEQ. ID. NO. 22, SEQ. ID. NO. 24, SEQ. ID. NO. 26, SEQ. ID. NO. 36, SEQ. ID. NO. 38, SEQ. ID. NO. 40, and SEQ. ID. NO. 42.
18. (PREVIOUSLY PRESENTED) A DNA expression construct comprising, in 5' to 3' order: a promoter selected from the group consisting of *AOX1*, *GAP*, *MOX*, *FMD*, *ADH*, *LAC4*, *XPR2*, *LEU2*, *GAM1*, *PGK1*, *GAL7*, *GADPH*, *CYC1*, and *CUP1*, the promoter operationally linked to a secretion signal sequence, the secretion signal sequence operationally-linked to a DNA sequence encoding

proteolytic tryptase having an active site mutation, the DNA sequence operationally linked to a terminator sequence, wherein the DNA sequence encoding the proteolytic tryptase having an active site mutation encodes an amino acid sequence selected from the group consisting of SEQ. ID. NO. 21, SEQ. ID. NO. 23, SEQ. ID. NO. 25, SEQ. ID. NO. 27, SEQ. ID. NO. 37, SEQ. ID. NO. 39, SEQ. ID. NO. 41, and SEQ. ID. NO. 43.

19. (CURRENTLY AMENDED) The DNA expression construct according to Claim ~~13~~ 18, wherein the secretion signal sequence encodes a KEX2 cleavage site.
20. (CURRENTLY AMENDED) A method of producing ~~a mutation of~~ enzymatically inactive proteolytic tryptases comprising transforming a eukaryotic host cell with an expression construct according to Claim 1, wherein the mutation causes the eukaryotic host cell to express enzymatically-inactive proteolytic tryptase.
21. (ORIGINAL) The method according to Claim 20, wherein a yeast host cell is transformed.
22. (PREVIOUSLY PRESENTED) The method according to Claim 21, wherein the transformed yeast host cell is of the genus *Pichia*.
23. (PREVIOUSLY PRESENTED) The method according to Claim 22, wherein the transformed yeast host cell is *Pichia pastoris*.
24. (PREVIOUSLY PRESENTED) The method according to Claim 23, wherein the transformed yeast host cell has the characteristics of *Pichia pastoris* ATCC 20864 or *Pichia pastoris* strain KM71.

25. (ORIGINAL) The method according to Claim 20, further comprising isolating the enzymatically-inactive proteolytic tryptase produced.

Claims 26-33 (CANCELED).

34. (PREVIOUSLY PRESENTED) A genetically-engineered eukaryotic cell which expresses enzymatically-inactive proteolytic tryptase wherein the eukaryotic host cell is transformed to contain and express an expression construct according to Claim 1.
35. (ORIGINAL) The genetically engineered eukaryotic cell of Claim 34, wherein the eukaryotic cell is a yeast cell.
36. (ORIGINAL) The genetically-engineered eukaryotic cell of Claim 35, wherein the yeast cell is of the genus *Pichia*.
37. (PREVIOUSLY PRESENTED) A genetically-engineered eukaryotic cell which expresses enzymatically-inactive proteolytic tryptase wherein the eukaryotic host cell is transformed to contain and express an expression construct according to Claim 13.

Claims 38-40 (CANCELED).

41. (PREVIOUSLY PRESENTED) A DNA expression construct comprising, in 5' to 3' order: a promoter, the promoter operationally linked to a secretion signal sequence, the secretion signal sequence operationally-linked to a DNA sequence encoding proteolytic tryptase, wherein the expression construct drives the expression of mature proteolytic tryptase that has enzymatic activity in eukaryotic host cells transformed to contain the expression construct.

42. (ORIGINAL) The DNA expression construct of Claim 41, wherein the DNA sequence encoding the proteolytic tryptase encodes a human proteolytic tryptase.
43. (PREVIOUSLY PRESENTED) A DNA expression construct comprising, in 5' to 3' order: a promoter, the promoter operationally linked to a secretion signal sequence, the secretion signal sequence operationally-linked to a DNA sequence encoding proteolytic tryptase, wherein the DNA sequence comprises SEQ. ID. NO. 8, and wherein the expression construct drives the expression of mature lung tryptase that has enzymatic activity in hosts transformed to contain the expression construct.
44. (PREVIOUSLY PRESENTED) A method of producing enzymatically-active lung tryptase comprising transforming a eukaryotic host cell with an expression construct according to Claim 43, wherein the host cell expresses enzymatically-active lung tryptase.
45. (PREVIOUSLY PRESENTED) The method according to Claim 44, further comprising isolating the enzymatically-active proteolytic tryptase produced.

Claims 46-53 (CANCELED).

54. (ORIGINAL) The method of Claim 44, wherein a yeast host is transformed.
55. (PREVIOUSLY PRESENTED) The method of Claim 54, wherein the transformed yeast host is a *Pichia* host.

56. (PREVIOUSLY PRESENTED) A genetically-engineered eukaryotic cell which expresses enzymatically-active lung tryptase wherein the eukaryotic host cell is transformed to contain and express an expression construct according to Claim 43.
57. (ORIGINAL) The genetically engineered eukaryotic cell of claim 56, wherein the eukaryotic cell is a yeast cell.
58. (ORIGINAL) The genetically-engineered eukaryotic cell of Claim 57, wherein the yeast cell is a *Pichia* cell.

Claims 59-63 (CANCELED).